THE VETERINARY RECORD

A Weekly Journal for the Profession.

FOUNDED BY WILLIAM HUNTING, F.R.C.V.S.

No. 1620. JULY 26, 1919. VOL. XXXII.

OBSCURE DISEASES.

Prof. Craig's report of cases of coccidiosis in bovines in Ireland, published a fortnight ago, and that by Capt. L. C. Maguire which appears in this issue, go to show that the disease has existed there unrecognised for several years—at the least, and in several districts. This fact should be suggestive to country practitioners. It is known to exist in Great Britain; it is not known to what extent, nor in what localities it exists. Probably, now that attention has been directed to it, it will be found to be more wide-spread than might be supposed. In some cases it has doubtless been mistaken for various diseases which are more commonly in the minds of clinicians; but it should not be difficult of diagnosis if the possibility of its existence is remembered. Certainly it is a disease against which our resources are available—as witness the results obtained by Capt. Maguire: and preventive measures can be put in force in all cases: so that it is distinctly desirable that the disease should be identified wherever it may exist.

Generally speaking, veterinary surgeons are not sufficiently anxious to get to the bottom of their cases. Nothing illustrates this better than the history of the discovery of Johne's disease in England. When it was first described, many practitioners recognised it from the description as a condition they had seen. The cases they had met had puzzled them more or less at the time; but they had been content with a clinical diagnosis of strongylosis, or perhaps of tuberculosis, without attempting to explain features which they had recognised as peculiar. A more searching spirit would have led to more frequent reference to laboratories, and probably to an earlier recognition of the disease. We know now that Johne's disease must have been very common in England long before it was recognised as a separate entity; and other diseases may exist around us still unrecognised for similar reasons.

Prof. Craig's note was avowedly published to stimulate further enquiry into the prevalence of bovine coccidiosis, and indicates the procedure to be followed in suspicious cases. Undoubtedly his suggestion might well be extended to more searching methods of investigating other obscure cases, and a wider view of all their possibilities than many practitioners favour to-day. Veterinary practice will only become what it ought to be when those who follow it avail themselves more frequently of the laboratory.

COCCIDIOSIS IN BOVINES.

With reference to Prof. Craig's article on coccidiosis, in *The Veterinary Record* of July 12, I was much surprised that he states this disease has not hitherto been reported in Ireland. In the summers of 1914 and 1915 I had several cases of coccidiosis, not in one district only in Ireland, but in several. The symptoms in all cases were quite similar to what Prof. Craig describes in his article, but certainly the mortality was greater than what he states. I should like to state my experiences of this disease.

In 1910 I was assistant to the late W. Dawson, of Cavan; during that summer an outbreak of what we at the time took to be dysentery occurred on a farm close to Corrigallen; Co. Leitrim. In all, ten animals were affected, eight of which died despite all we could do for them. These animals varied from 1½ to 2 years old. In this neighbourhood there were several other outbreaks with the same high mortality. At the time, we attributed these cases to the cattle eating some poisonous plants, as it was a very dry summer, the result being a severe shortage of grass.

I did not see any more cases of this until the summer of 1914. This time the cases were more or less isolated, and occurred in a locality close to Granard, Co. Longford. Several of these animals died, although I tried all kinds of astringents and intestinal antiseptics, none of which seemed to do any good. The symptoms and course were practically identical with what Prof. Craig describes.

During the summer of 1915 I again had several isolated outbreaks. This time they were near to Nenagh, Co. Tipperary. I particularly noted that all the outbreaks I had occurred in rough mountainous districts.

As none of the English text books on veterinary medicine seemed to throw any light on the subject, all stating that coccidiosis was unknown in Ireland, I consulted Hutyra and Marek's book on medicine. Here the symptoms described under coccidiosis, haemorrhagic or bloody diarrhoea, were so identical with those manifested in the cases I saw, that I resolved to examine faeces and scrapings from bowel for the eggs of the coccidia. On microscopic examination the eggs or oocysts were quite easily found. They abounded in thousands, and there was no mistaking that coccidia was the causative agent of the disease.

Having ascertained the cause, the next difficulty was to find a cure. I knew perfectly well all the ordinary medicinal and dietetic treatments were next to useless: so it occurred to me that the cause of the disease resembled that of amoebic dysentery

in man. As Ipecacuanha, through the agency of its alkaloid, Emetine, is a specific for this latter disease in man, I resolved to try this in the next case of coccidiosis I should meet with. I had not very long to wait, for within a fortnight I had five cases on one farm and three on another close by. To these animals I gave large doses of Ipecacuanha, together with other astringents. The effect was most remarkable; after about the third dose the blood in faeces disappeared; in about two days the diarrhoea had ceased, and all eight animals recovered. Since then, I have had several more cases and now I use Dover's powders, ʒss doses three or four times daily, according to severity of the case. Since using this I have not, I think, lost a single animal suffering from this disease. The last cases I saw were three heifers, about 1½ years old, on a farm in Wiltshire. These I treated as I have already stated, and they quite recovered in a few days.

In 1915, when I discovered the coccidia I wrote an article for *The Record* which I was under the impression I had sent to the editor of this paper; hence my surprise when Prof. Craig stated the disease had not been reported as having occurred in Ireland. The only explanation I can offer is that at about the time I wrote this article I was taken ill with typhoid fever and was ill for ten weeks; hence I may have omitted to post article to *Record*. My experience will show that coccidiosis is widely spread over Ireland, and also I believe quite common in England.

Personally, in all cases of dysentery in young animals I now prescribe Ipecacuanha, on the supposition that it may be a case of coccidiosis I am dealing with.

L. C. Maguire, Capt., A.V.C.

THE INDIAN CIVIL VETERINARY DEPARTMENT.

I beg to draw attention, through the medium of your columns, to the conditions prevailing in the Indian Civil Veterinary Department, so that they may, in some small measure, be a guide to future entrants, if any.

When a Veterinary Officer is recruited in England for the department, the pay offered at the commencement of his service, Rs. 500 per month, or £400 per annum, appears to compare favourably with the amount of salary which a recently qualfied assistant would receive in private practice. He learns that his pay will increase in due course to Rs. 1200 per month, and that he will be in receipt of this amount after twenty years service, after which he can make no further progress.

So much he learns; but nothing is explained to him as to the relative value of this amount, nor of the conditions under which he will have to earn it.

After arriving in India, he soon learns that the salary, which appeared good in England, has not such a rosy hue in India, in fact, for a married man with a family the maximum pay of Rs. 1200 per month is not a living wage.

The Department was was brought into being by drafting officers from the Army Veterinary Department who were in British service, and in order to induce these officers, who had seen the country and understood the conditions, to remain in the country for thirty years it was found necessary to grant a civil allowance in addition to their military pay, also to improve their pension and furlough pay, so that a colonel could receive Rs. 2000 per month with a minimum of Rs. 1720 p.m., and any officer going home on furlough, whatever his service, would receive a minimum furlough pay of £500 per annum. They could also obtain a maximum pension of £700 per year, and a minimum, after thirty years service, of £620 per annum.

It is well to note that these conditions were considered necessary thirty years ago to attract those conversant with the conditions of the country; but now-a-days when the cost of commodities has increased 200 and in many cases 300 per cent, the maximum pay offered to Civilian officers recruited in England is Rs. 1,200 per month after 20 years service, with no increase up to 30 years, before which they are not entitled to retire. The retiring pension offered is £437. Cognizance must be taken of the fact that civilian officers are doing work of the same nature as the military officers; but the civilian officers come to India not knowing the value of their pay, and totally ignorant of the poor conditions of service and bad climatic conditions.

It appears attractive from an English point of view that after eight years service an officer is entitled to two years furlough on half pay. On arriving in India he finds that the department is understaffed, so that it is very difficult to obtain furlough at the time it is needed, because there are no reserve officers to do the work of the one proceeding on leave.

Suppose, for instance, that an officer has been granted even six months leave after eight years service. Under what conditions would he proceed to England? The amount of pay which he would draw would be Rs 2460, out of which he has to pay his return fare. This fare would vary a little according to the part of India in which he is stationed, but the average return fare, including second class on the boat, would not be less than Rs1300, so that he would have Rs1160 or about £72 to keep him in England for five months, that is allowing a fortnight each way for the journey as in pre-war days. Out of this amount he would have to buy many additions to his outfit, so that it is perfectly clear to everyone that the furlough pay is wholly inadequate, more especially at the present time, when the sovereign in England is worth so little.

These remarks on the furlough pay have so far only applied to the bachelor, but the lot of the married men is much more hopeless. If, after eight years service, a married officer is granted six months leave and takes his family to England, the whole of his pay is swallowed up in train and boat fares, so that when in England he has either to live on his capital or get into debt, from which it is practically impossible for him to emerge.

The above conditions may be contrasted with the conditions of furlough for the military officers in the department. As stated above, the latter proceed on furlough on a minimum pay of £500 per annum.

Also, consider the hardships of the married officer while living in India. The climate in the hot weather is so trying that he has to send his wife and family to a hill station for about six months each year, thereby incurring the expense of keeping up two establishments, as he himself cannot leave the plains except for a limited period.

The Veterinary Officer is usually posted to fairly large stations, where expenses are naturally greater than in small ones, so that it is impossible for a married man to save anything, with the result that after thirty years service he retires with a pension of £437 and what remains, after paying his debts, of the amount he has compulsorily placed in the Provident fund, as his only assets, and this at a time when his family expenses such as education fees etc., are often at their highest.

Also his pension is not transferable to the wife on his death, so should this latter contingency occur soon after the completion of service, it is clear that the officer's family would be practically unprovided for, as during his service he cannot afford to insure for any appreciable amount.

Should an officer contract any illness sufficiently serious to warrant his being placed on the sick list, he would immediately be placed on half pay, which is not sufficient to keep him and his family, with the result that he must inevitably run into debt.

From the foregoing remarks it will be seen that it is highly advisable for a veterinary surgeon who contemplates service in the Indian Civil Veterinary Department to make full enquiries before arriving at a definite decision. He will then be aware of the conditions, under which he will have serve, after which he will have only himself to blame if he lapses very quickly into the discontented state which prevails very strongly throughout the Department at the present time.

"EX ORIENTE LUX."

ANGLO-FRANCO-BELGIAN VETERINARY RELIEF FUND.

To the Editor of the "Veterinary Record."

Sir,—We shall be grateful if you will kindly allow us the use of your columns in order to call attention once again to the Anglo-Franco-Belgian Fund which was established four years ago. The object of the fund is to provide assistance for the repatriation of those unfortunate Belgian and French veterinary surgeons whose practices lay in the devastated regions of Belgium and Northern France, and who in many cases have lost both homes and fortune. The fund is administered by a Central Committee in Paris, and we hoped to be able to transmit to that Committee from British veterinary surgeons a sum such as would be in keeping with our wealth as a nation and worthily express our sympathy with our unfortunate confrères.

At the beginning of this year we sent the sum of £300 to France, being practically the whole of the funds then in hand, and we made an appeal to the profession for further funds. Up to date about £300 has been received in answer to this second appeal, including one subscription of £100 from an anonymous donor. We think this response is not quite what it should be, and we take the liberty of publishing below an analysis of the subscriptions for the information of the profession.

From Veterinary Societies a sum of £119 3s. 2d. has been received, distributed as follows:—

6 English Societies	£59	7	0	
4 Irish Societies	46	1	6	
3 Societies abroad	17	14	8	
				£119 3 2

The absence of any subscription from Scottish or Welsh Societies surely needs only to be mentioned for the omission to be at once remedied.

The remaining subscriptions have come from no more than 168 members, the amounts being distributed as follows:—

1	of	£100	0	0		
2	"	20	0	0		
1	"	15	0	0		
2	"	10	0	0		
17	"	5	5	0	or	£5
10	"	3	3	0	or	3
28	"	2	2	0	or	2
107	"	1	1	0	or less.	

May we once more appeal to the remaining 3000 members of the profession to send some sum, however small, so that the contribution sent from members of the R.C.V.S. may be such as we may have no reason to be ashamed of.

Subscriptions should be made payable to the "Veterinary Relief Fund," and addressed to 10 Red Lion Sq., London, W.C. 1.

FRANK W. GARNETT, Chairman.
JNO. A. W. DOLLAR, T. S. PRICE } Hon. Treasurers.
10 Red Lion Sq., London, W.C. 1.
STEWART STOCKMAN, FRED BULLOCK } Hon. Secretaries.

NATIONAL VETERINARY MEDICAL ASSOCIATION

SOUTH-EASTERN DIVISION.

A re-union meeting was held at the County Hotel, Canterbury, on Saturday, 14th June. Mr. E. Lyne Dixon, M.R.C.V.S., Margate, President, was in the chair, and there were also present Messrs. J. Crowhurst, F.R.C.V.S., Canterbury; F. C. Gillard, F. C. Golden, H. B. Eve, Folkestone; E. Morgan, Faversham; W. W. Gulleford, Hythe; A. T. Crowther, Deal; E. W. Morris, Uckfield, Sussex; T. F. Hogben, Ash; G. Wacher, Ashford; Major L. Lyne Dixon, R.A.V.C., and H. P. Hogben, Folkestone, Hon. Secretary.

Letters of regret at inability to attend were received from Lt.-Col. E. M. Perry, C.B.E., R.A.V.C., Maj. Hibbard, O.B.E., R.A.V.C., Capt. Austin, R.A.V.C., on active service; C. Roberts (owing to non-demobilisation of other veterinary surgeons in district and own assistant) T. Salusbury Price, Prof. G. H. Wooldridge, A. Whicher, C. Crowhurst, J. Washford, J. B. Dier, T. W. Cave, P. Gregory, D. Pugh, and A. Spicer. Also telegrams from J. B. Buxton, Herne Hill; J. Bell, Catford; E. Ebbetts, Rochester; C. Morgan, Nonington.

The Hon. Sec. read the minutes of the last meeting held on 20th January, 1917, which were confirmed.

The PRESIDENT, in addressing the meeting, said: Gentlemen,—I wish to express my unfeigned pleasure at seeing you all once again at this meeting of the S.E.V.A. after such a long enforced separation. The upheaval which has occurred, and marred the pleasure of our pro-

fessional intercourse, during the last few years, needs no words or apologies of mine to assign reason for the cause. We have one and all been otherwise too engaged to permit a continuance of the work which we commenced and carried on in the good old days of Peace. Meetings would have been futile. Of the members of our Association no less than twenty-one, to my personal knowledge, joined the R.A.V.C.:—Messrs. F. J. Austin, R. C. Baxter, J. Bell, A. C. Burton, J. B. Buxton, L. B. Cole, A. T. Crowther, W. Caudwell, H. V. Dier, G. Dunkin, Maj. Edwards, R. Elliott, F. C. Golden, F. C. Gillard, T. Hibbard, T. Huband, E. M. Perry, J. M. Richardson, G. Wacher, A. Whicher, and A. L. Wilson; whilst those engaged as civil Veterinary Surgeons and Transport Officers were: James Crowhurst, Cecil Crowhurst, E. L. Dixson, J. B. Dier, Elmer Ebbetts, H. B. Eve, T. F. Hogben, E. Morgan, and T. C. Toope.

I regret if I have omitted unwittingly any names. How many of these gentlemen have been demobilised I do not know. There are a few present, will they accept from me, on behalf of this Association, my extreme gratification at their return home, and, also, my congratulations on being Representatives of that branch of H.M. Forces upon which the late Commander-in-Chief (Sir Douglas Haig) paid such a glowing tribute of appreciation—the R.A.V.C. On behalf of those of our professional brethren, and they are not a few, who are at rest, I would ask you to simply rise and thus give silent expression to your sympathy and respect.

I feel it incumbent on me as your President to make some reference to our Association after this long interval of inactivity.

A short resumé of the foundation and work of the Association will, I think, not be out of place, as one is apt to forget the good work that was being done, and how, just at the time war was declared, the Association, owing to the interest taken in its welfare by the members, was forging its way to the front rank as one of the most successful in the United Kingdom. The Association was founded on the 3rd of January, 1912, at a meeting at the County Hotel, Canterbury, at which there were present: Messrs. James Crowhurst, W. H. Crowhurst, G. W. Dunkin, Canterbury; Prof. T. W. Cave, Wye, Ashford; Messrs. Elmer Ebbetts, Rochester; E. Lyne Dixson, Margate; T. Hibbard, Gillingham; T. F. Hogben, Ash, Canterbury: T. Huband, Wrotham; F. C. Gillard, Folkestone; W. W. Gulleford, Hythe; (late) R. Roberts, Tunbridge Wells; (late) T. C. Toope, Dover.

Mr. James Crowhurst (to whose initiation in conjunction with our late lamented Secretary, Mr Toope, the formation of the Association was in a great measure, if not entirely, due) was elected first President. Mr. Roberts, myself, and Mr. W. H. Crowhurst were elected Vice-Presidents; thus our little Association of Thirteen Members was launched, with every prospect of success, and before the termination of the same year, had enrolled an actual Membership of no less than Forty. At the termination of the first year, Mr. James Crowhurst was re-elected President for the ensuing year, *1913*.

It was during this year, that the "Tuberculosis Order" was brought into force by the Government. A very large and influential meeting of Veterinary Inspectors from throughout the country assembled at the Holborn. They were only just initiated in the work and becoming proficient in the various details, and endeavouring to the best of their ability to assist the Government in mitigating, and if possible eradicating, this Bovine Scourge when War was declared, and owing to the inability to carry on such a far-reaching Order, it was revoked; but there is every reason to expect, judging from Parlimentary Reports, that it will speedily be in force again.

On April 5th a special meeting of the Association was held at the County Hotel Canterbury, at which Fifteen Members were present, when a paper was read by the late T. C. Toope on the Tuberculosis Order 1913, dealing with ante-mortem and post-mortem examinations, tuberculin testings, microscopic examination, valuation, disinfection, remuneration, and many other points incidental to the Order, when an instructive discussion followed.

A General Meeting was held on May 7th at the Star Hotel, Maidstone, when no less than Thirty-six Gentlemen were present (this Meeting being preceded by a Veterinary Inspectors' Section). At the General Meeting, Mr. Basil Buxton gave a practical Microscopic demonstration of the presence of Tubercle Bacilli in Milk.

A Meeting was also held during 1913 at which Mr. Elmer Ebbets read a paper on Johne's Disease and the differentiating symptoms from those of tuberculosis.

At the second annual General Meeting, 1914, at the the Royal Mount Ephraim Hotel, Tunbridge Wells, on January 15th, there were thirty-two gentlemen present. The members kindly elected me President. Mr. W. Caudwell read a paper on "Notes and Observations of twenty cases of Tuberculosis" and an interesting discussion ensued, after which the members and several ladies sat down to dinner (fifty in number) when a very pleasant musical evening was spent.

Then on May 3rd there was an interesting and successful meeting (nineteen members being present) at the Rose and Crown Hotel, Tonbridge, when Mr. E. W. Morris of Uckfield read a paper on "Immunisation and the country veterinary practitioner." This was followed by an animated discussion and exhibition of microscopical specimens.

On June 3rd, members (23 in number) met a deputation of the Canterbury Farmers' Club and also the East Kent Chamber of Agriculture (consisting of Dr. Vipan, Mr. D. Brice and E. L. Gardener) with a view to discussing the working of the Swine Fever Regulations, and also of the valuing and compensation paid under the Tuberculosis Order. At the termination of the discussion, the members of the deputation thanked the Association for its very valuable information.

That was practically the end of the Association and its useful work, as war was declared shortly afterwards; but although only a brief outline of the principal meetings has been given, unceasing and untiring work was performed during 1912-13 and the first half of 1914. Amongst the foremost items was a deputation (consisting of Mr. Crowhurst, Mr. Roberts and myself) waiting upon the Kent County Council at the Sessions House, Maidstone, where we obtained a very considerable improvement in the fees paid to veterinary surgeons.

Mr. Toope (our late Secretary) was continually corresponding with and fighting the Insurance Companies with a view of altering the scale of fees then in existence, and formulating a scheme more remunerative to all.

The outbreak of hostilities not only affected our own and other Veterinary Associations throughout the United Kingdom, but also put a stop to the great International Veterinary Congress which was to have been held in London on the very day that war was declared. What bitter disappointment this entailed to the many gentlemen who had for many months been working so hard for its reception, I need not dilate upon. Everything was thrown to the winds, and the energies of the Mother Country and her Colonies were directed into one channel only—to unite in rallying round the British flag. Homes were broken up, men of a military age left their practices and joined the colours, and the nation as we all know (men and women alike) answered the call and acted as only Britishers can.

Little wonder then, at the impossibility of keeping our little Association going. No meetings were held during the remainder of 1914. The year 1915 was a complete blank. In 1916 there was but one special meeting called and adjourned. It was during this year that we lost the valuable services (through death) of our old friend and Hon. Secretary, Theodore C. Toope.

1917. The annual meeting was called on the 20th January (being the third since the formation of the Association in 1912). This was followed by a small dinner at the County Hotel, Canterbury, at which Major Skey, Major Walsh and Captain Wood, members of the Canadian A.V.C., stationed at Shorncliffe camp, were our invited guests. 1918 was a blank.

I fear, gentlemen, I have wearied you with this retrospective view of "Our Association," but there is a bright prospective one to inaugurate which I have requested our hon. secretary to call you together today to celebrate; an Association that, on starting with 13 members, enrols 40 by the end of the first year, increasing that to 55, which was the roll of members in 1914, is an Association to be reckoned with.

To-day, by death, infirmity, removals and other causes, our roll is reduced by nine, leaving 46 in all. Our financial balance, as can only be expected, is small, to 31st December, 1918.

Receipts.				£	s.	d.
Subscriptions—3 Voluntary	£1	11	6			
2 Back Subs	2	2	0			
				3	13	6
Balance to January 20, 1917				5	18	11
				£9	12	5
Expenditure.				£	s.	d.
A. G. Meeting January 20, 1917.						
Room		5	0			
Reporter	1	1	0			
Typist		5	0			
Petty Cash		8	0			
				1	19	0
Balance, December 1918				7	13	5
				£9	12	5

In conclusion, allow me to thank you most heartily for your attendance here to-day. Doubtless there are several yet to be demobilised, but I do think that we, as an Association, are justified in once more concentrating our individual and collective energies in resuscitating and furthering its interests, and to that end I call upon you to assist me in carrying on the business on the Agenda.

After the meeting I trust that as many of you as can, will stay to tea.

ELECTION OF PRESIDENT.

Mr. JAMES CROWHURST said as the oldest man in the room he rose with very considerable pleasure to propose that Mr. E. Lyne Dixson be re-elected President for the ensuing year. When he (Mr. Crowhurst) resigned the position of President, he did so with the object that honours should be divided. While he was President, he greatly appreciated the honour but he felt it right that the position should be taken by another member. He believed that the Asssociation benefited by a change of President, but their present President had held office only during the war period, when to a large extent their work had been suspended, and he thought the ensuing year would give him an opportunity of accomplishing much good work for the profession. He wished Mr. Dixson hearty success during the ensuing year, and he was sure every member would do his utmost to support him in his office, so that they might become an efficient body. His one aim and object was the success of their Association, and he thought they might aspire to become as efficient as the best. If they did that it would be a matter of congratulation for every member of the Association.

Mr. T. F. HOGBEN seconded the motion, and said Mr. Dixson had laboured for the Association under most trying circumstances, and he was sure he would do his utmost for the good of the Association and the profession generally during the ensuing year.

Mr. DIXSON said he held office for the first half of 1914, and he had attended all the meetings since, but he saw there were several younger men in the room who he thought might take the position. He had done his best during the time he had held office, but with the permission of the meeting he would withdraw his name if some other gentleman would be proposed.

Mr. GILLARD said that Mr. Dixson had not had a full year under ordinary conditions, and he thought the meeting was anxious that he should have one year in order to display his wonderful energies with regard to management and organisation. He hoped Mr. Dixson would not withdraw because they could not have a more able President than he, and for the first year of their new life they ought to re-elect him. (Applause)

Mr. DIXSON said if it was the wish of the meeting he would undertake the duties to the best of his ability.

The proposition was then put to the meeting and carried unanimously. The President thanked the meeting for its renewal of confidence in him.

Vice-Presidents.—Messrs. J. CROWHURST, proposed by Mr. T. F. Hogben, seconded by Mr. Golden, P. GREGORY, by Mr. T. F. Hogben, and Mr. E. Morgan, T. F. HOGBEN, by Mr. Morris, and Mr. Gillard, E. W. MORRIS, by Mr. J. Crowhurst, and Mr. T. F. Hogben, CECIL CROWHURST, by Mr. J. Crowhurst, and Mr. Eve, W. CAUDWELL, and T. A. HUBAND, by Mr. Gillard, and Mr. E. Morgan were elected.

The Council, composed of the following members: Messrs. E. Ebbets, T. Hibbard, J. B. Dier, G. W. Dunkin, C. Crowhurst, F. C. Gillard, J. H. Ripley, E. Morgan, C. Roberts, was then elected *en bloc*.

The PRESIDENT said the Association had always had a Veterinary Inspectors' Committee, which met prior to the ordinary meetings of the Association, and consisted of those members who held positions under local bodies and discussed anything of interest to veterinary inspectors only.

The members of the Veterinary Inspectors' Committee in the past had been the President, Messrs. J. B. Dier, C. Crowhurst, E. Ebbetts, T. Hibbard, J. H. Ripley and F. C. Gillard.

Mr. GILLARD proposed that any member of the Association who was an inspector should automatically become a member of the Inspectors' Committee. Mr. T. Hogben seconded and the propositoin was agreed to.

Hon. Secretary. Mr. G. Wacher proposed that Mr. H. HOGBEN should be re-elected Hon. Secretary of the Association. Mr. E. Morgan seconded.

The PRESIDENT said Mr. Hogben had held the position since the death or their late indefatigable Hon. Secretary, Mr. Theo. Toope, and as President, having had many communications with Mr. Hogben, he could say that while he did not say much, he worked hard and thought a lot, and he had the interest of the Association at heart.

The proposition was carried unanimously, and Mr. H. Hogben in returning thanks, said the position of Hon. Secretary was a difficult one to fill, but he would endeavour to carry on the work for another year, and do the best he could to further the interests of the Association.

Messrs. T. F. Hogben and J. Crowhurst were re-elected hon. auditors on the motion of Mr. E. Morgan, seconded by Mr. Morris.

UMI

SUBSCRIPTIONS.

The PRESIDENT said he did not see how they could call upon members to pay subscriptions for the years when no meetings were held, and there no expenses. The association was then in a state of suspended animation.

Mr. GILLARD said he would like to suggest that all members of the profession in the three counties within their sphere of influence, should be circularised with a view to their becoming members of the Association. They ought to point out as strongly as they could, that they thought it the duty of everyone in the profession to join, and they might also remind those members who have not paid their subscriptions for 1914, and ask them kindly to do so. Mr. Eve seconded.

Mr. GILLARD said that while the Association had done a lot of good in the past, it was likely to do more in the future if they could get every member of the profession in the three counties to join. The more members they could get the better.

Mr. GULLEFORD said he thought members should be invited to join them in a more earnest manner than the past. The more members they could get, the better it would be for them all. It would also enhance that brotherly feeling they had for one another.

The PRESIDENT thought the proposal was a good one, not only from the point of view of furthering their professional knowledge, but also from the social aspect. There were several matters coming forward in the near future that would demand their closest attention, and the larger the number of members they could get in their Association to discuss those matters the better. The proposition was put to the meeting and carried.

The resolution received from the Derbyshire Veterinary Association concerning Veterinary Surgeons acting at Live Stock Shows was put before the meeting.

Mr. GILLARD said that he would like to propose that the Association support the Derbyshire Veterinary Association in regard to the first portion of their circular letter. He personally thought that they in the county were strong enough to refuse to attend professionally at any horse or cattle show where there was any exhibition for the sale of medicines and instruments belonging to quack vendors. He did not think, however, they wanted to prevent members of the profession from acting as honorary veterinary surgeons at shows.

Mr. J. CROWHURST said he should like to see the medicine vendors not encouraged by farmers to the extent that they were, but he doubted very much whether they would be effective in that, because he thought they were up against a rather powerful body. Personally, he would be prepared to refuse to attend a show where patent medicines were on sale, but he was afraid they would not be successful. However, he no harm in supporting the Derbyshire resolution.

Mr. GILLARD said that there was a clause in the rules with regard to all shows that before medals were granted the animals had to be examined by a qualified veterinary surgeon. There must be a veterinary surgeon at every show, and if they in a body refused to attend any show where medicines were exposed for sale, the Show Committees could not get animals examined, and the awards could not be made. He thought the profession was in a very strong position.

Mr. E. MORRIS said the suggestion would be all right if they could get the whole of the profession to agree, but there were always two or three veterinary surgeons in a vicinity who would not fall into line, and then the whole thing fell to the ground.

Mr. GILLARD said he believed they were powerful enough to fight the companies. He was prepared to give his solemn undertaking that he would not attend a show were medicines were on sale. Mr. MORRIS said he was prepared to support the resolution, but he did not think they would be able to carry it out.

Mr. CROWHURST said he did not want to discourage the motive of Mr. Gillard, but he was rather doubting whether they could command success for it. He had frequently refused to accept the fees offered by the insurance companies, but there was generally someone ready to take on the work. There was no harm in supporting the proposition received from the Derbyshire Association, and if they could induce other associations to support it, and thus be a strong body in opposition, they could carry their point without any difficulty. The matter rested entirely in the hands of the profession.

Mr. E. MORGAN said if they passed the resolution and then sent a copy on to other Veterinary Associations, they would eventually get the consent of all the associations.

The HON. SECRETARY said there was no doubt the Derbyshire Association had sent a copy of the resolution to every veterinary association.

Mr. GILLARD said they could agree to carry out the effect of the resolution with respect to shows in their own locality, and if the Show Committee wanted to bring someone down from the North to East Kent, then they must let them do it.

Mr. EVE said if they pledged themselves in East Kent not to act at shows where medicines were sold, and a man in Kent did it, they could blackball him as a member of that Association.

The PRESIDENT said that was a question that they wanted to set about in no half hearted manner. They wanted to say emphatically what was their intention with regard to the matter. They must not only record their vote, but if as an Association they were going to carry it out, they must use every possible means to gain their end. Otherwise it would be no good.

Mr. GILLARD then proposed "That with regard to the first proposition of the recommendations of the Derbyshire Association, we, the members of the the South-Eastern Association, support such proposition, and agree that as far as we individually are concerned, in future, we refuse to give veterinary attendance at shows where medicines and instruments are exhibited for sale by quack vendors."

Mr. EVE seconded, and the proposition was carried unanimously.

The PRESIDENT said with the second portion of the Derbyshire Association's recommendations he did not agree, because he thought if they were asked to act as honorary veterinary surgeons they ought to feel honoured rather than want to be paid. He would propose that as an Association they do not support that recommendation.

Mr. GILLARD said the shows that were held were not money-making concerns.

Mr. E. MORGAN seconded, and the President's proposal was agreed to.

NATIONAL ASSOCIATION OF VETERINARY INSPECTORS AND ROYAL SANITARY INSTITUTE MEETINGS.

The question of sending a delegate to the veterinary inspectors' meeting in connection with the Royal Sanitary Institute Conference at Newcastle, in August, was next considered.

The PRESIDENT said the Association's funds would not run to paying the expenses of the delegates' attendance, but he should endeavour to be present at the conference, and he would be pleased if as many inspectors as possible could accompany him on the occasion.

Mr. CROWHURST said it was an excellent Association and wanted supporting by all the means they could, and he was pleased to hear that their President was going to attend. He hoped that many members would accompany

the President, because it was a meeting of great interest and did a great deal of good throughout the profession.

Mr. GILLARD said as the meeting was going to decide future action on the part of the veterinary inspectors of the Association, it was a pity the funds of their Association were so low. He thought that the Association should have some voice in any proposals that were submitted at the meeting, because they might find suggestions made were applicable to the North Country and not applicable to Kent, Surrey and Sussex. It would be to the advantage of individual members practising in these counties that they should be represented. He would like to propose that the President officially represent the Association.

The PRESIDENT said in the crippled state of their Association's finances he should be very pleased to go as their President at his own charges, and take any notes and give details at the next meeting. He would do his best to represent the South-Eastern Association. (Applause).

Mr. GILLARD said it was very generous of the President, and he begged to propose a vote of thanks to him for his offer. Mr. E. Morgan seconded, and the motion was carried.

MINISTRY OF HEALTH ACT, 1919.

A draft circular was submitted from the President of the Royal College of Veterinary Surgeons regarding the above Act, with recommendations that the Association and its members should use all means within their power to ensure that the profession be properly represented on any Consultative Councils organised under the Board of Health appointed by the Act.

A resolution that action be taken in accordance with the recommendations of the circular letter of the President R.C.V.S. was carried unanimously. The members were also earnestly requested to support the finances of the College to the utmost of their ability, as the College had been unable to do what it otherwise would have done owing to lack of funds.

At the invitation of the President the members then adjourned to tea, where a pleasant, social time was spent.

INSPECTORS' SECTION.

A Veterinary Inspectors' meeting was subsequently held with the President in the chair, supported by all the members present at the general meeting of the Association.

The question of the inadequacy of the scale of fees allowed to inspectors by the County Council at the present time was carefully considered in connection with the increase of fees proposed by the National Association of Veterinary Inspectors, and the increased cost of living and altered conditions of the times.

The following revision to scale was recommended :—

Microscopic examination in all cases. (Anthrax, Mange, Sheep Scab)	£1	1	0
Attendances (where not otherwise provided for in scale.) Ordinary visit *e.g.* examining suspected animal		10	6
Inspection and examination of contact animals		10	6
Attendance at a meeting of a Divisional Sub-Committee	1	1	0
Attendance at Market. For every hour engaged in a Cattle Market or any Cattle Fair or Public Sale requiring inspection of stock		10	6
Glanders. Valuing horses, per animal		10	6
Post-mortem examinations in all cases	1	1	0
Travelling allowance otherwise than by railway, per mile one way		1	3

A deputation composed of the President, Messrs. Jas. Crowhurst, F. C. Gillard, and T. F. Hogben were appointed to wait on the County Council.

The Secretary was instructed to publish revised scale for the information and approval of Veterinary Inspectors in the County of Kent.

It was decided to hold the next meeting of the Association at Star Hotel, Maidstone, on Thursday, September 18th.

HUGH P. HOGBEN, Hon. Sec.

NATIONAL VETERINARY MEDICAL ASSOCIATION

SCOTTISH METROPOLITAN DIVISION.

A meeting was held on Wednesday, June 4th, in the Royal (Dick) Veterinary College, Edinburgh, Mr. A. Gofton, F.R.C.V.S., Edinburgh, presided. The following members were present :—Professors Bradley, Gofton, Wilson and R. G. Linton, Edinburgh ; Messrs. McKenzie, Kirkcaldy ; McFarlane, Doune ; Taylor, Edinburgh ; Cameron, Berwick-on-Tweed ; Peggie, Biggar ; and Major Baird, Edinburgh. The visitors included :—Col. Watson, D.S.O, A.A.V.C ; Capt. E. R. Steel, U.S.A., Army Vet. Service, and a number of representatives of the Australian and American Veterinary Services.

The Chairman said that Mr. Riddoch, the President, was unfortunately ill and confined to bed, and was unable to be present. The Council at its meeting a few days ago instructed the secretary to send a note of sympathy in his illness, with an expression of their good wishes for an early recovery, and he was quite sure everyone present would endorse the action of the Council. (applause).

The Hon. Secretary (Mr. James Henderson) read the minutes of last meeting, which were approved The Secretary submitted a letter from the Royal Sanitary Institute requesting that a delegate or delegates should be sent to the congress to be held in Newcastle-on-Tyne July 28th to August 2nd. It was agreed that the Chairman should represent the Society at the Congress. The Secretary submitted the financial statement, and said that it had been agreed in Council to wipe off the arrears of subscriptions and start afresh now. The financial statement was adopted. The office bearers were then elected,

President : Mr. John Riddoch.

Vice-Presidents : Messrs. Gofton, P. Wilson and Prof. A. Wilson.

Secretary and Treasurer ; Mr. J. Henderson.

Council : Prin. Bradley, Prof. Dewar, Messrs. T. M. Inglis and A. Baird.

Auditors : Messrs. Baird and Riddoch.

On the motion of the Chairman, Prof. R. G Linton, M.R.C.V.S., Edinburgh, was elected a member of the Society.

DISCUSSION ON SPECIFIC OPHTHALMIA.

The CHAIRMAN : I should like on behalf of the members of the Association present to express our pleasure at seeing with us to-day some representatives of the Australian Army Veterinary Corps and of our American Allies. It is extremely unfortunate that war conditions have not yet passed away ; in consequence of the undue calls on the time of our members, the numbers present to meet them to-day are rather small. I think our friends will realise that it is not from any neglect on the part of our members that we have such a small attendance, it is simply due to the numerous calls on their time. The The first speaker is Lt.-Col. T. Matson, D.S.O., B.V. Sc. of the Australian A.V.C. and I ask him to open the discussion on Specific Ophthalmia, a disease which has

been a source of trouble in the various theatres of war, particularly in France.

LT.-COL. MATSON: When I was asked some little time ago to suggest some disease which occurred during the war in France which might affect conditions of health of animals in the United Kingdom, I thought of Specific Ophthalmia as one which might provide a suitable subject for discussion this afternoon. Several diseases caused us considerable trouble in France, but we were able to deal with them satisfactorily owing to scientific methods having been devised and worked out before hand. For instance, mange—we had a fair amount of difficulty with mange but we knew how to deal with and prevent it, and we knew how to treat it We were also very successful in dealing with glanders and preventing it. But there was one disease which had not been dealt with satisfactorily before the war, or even since the war, and we have been unable to find its cause, that is Specific Ophthalmia. I think it a very suitable subject for discussion as it might lead to some further research into what seems to be a very probable trouble in the United Kingdom as well as in other parts of the world. I think it was the greatest cause of loss amongst horses and mules in France. I think we lost more animals through Specific Ophthalmia than we lost through the action of the enemy. When I went through one lot of heavy horses for classification I found 30% of them affected in one or both eyes. Probably 5% were blind in both eyes. Amongst the light animals, for instance, the Field Artillery, the incidence was lower, as it was not considered advisable to send up animals which were affected in the eyes. You cannot expect animals affected in one or both eyes to be carrying up munitions, and the same thing applies to riding horses. It is not safe to ride a horse which is blind in one or both eyes. The result is these horses were disposed of, and were sent down to the base. Most of these animals were sold at the bases to butchers, and a considerable amount of money was recovered for them in that way. Unfortunately I have no figures to prove the numbers that were lost in that way. Probably they be will be forthcoming later on. Mr. Gofton will be able to tell you more about numbers, but we had no method of finding out about them while we were in the field. This disease is not new. It seemed to get a big hold in France during the war. From all I have been able to find out this disease existed in Northern France and Belgium for many years, and a great number of the horses which came from America became affected in the eyes. I don't think they were affected when they were bought, but they became affected afterwards. It also appeared amongst the English horses and amongst our Australian horses, and after the fighting ceased I was able to find out that a considerable number of German Army horses as well as German Civilian horses were affected in the same manner. When the Australian Corps came from Egypt we had a few cases with us.

Many of you are quite familiar with the disease. There is very little shown in the text books published in English on the subject; but I am certain every one who has been through the war is familiar with it. For the benefit of those who are not, I will tell you a few things about it. It is usually ushered in by a fairly mild attack. Commonly one of the eyes is closed and tears are running down the face of the animal, which seems very sensitive about the eyes. It recovers usually in a few days, and probably in four or five weeks the animal has another attack. The first attack is fairly mild, the later attacks become more severe.

But experience seems to prove that an animal which is once attacked in one eye or both eyes will ultimately become blind in one or both eyes. I could not verify that, but from our experience in the field every horse that becomes affected in an eye will ultimately become blind in that eye and probably in both. Sometimes it becomes blind after three or four attacks and sometimes after seven or eight.

On the question of contagion there has been a great deal of discussion, and opinions which are very contradictory have been expressed. In 1917 in France we had a conference of veterinary surgeons, Army administrative officers, and several bacteriologists, and there was much difference of opinion as to its being contagious or non-contagious, and we came out after several hours discussion knowing as much about it as when we went in. I am afraid when I finish you will know just as much about it. (Laughter) It has appeared in Northern France and Belgium for many years, but its occurrence amongst the military horses was sporadic. It was not in any way in the nature of an epidemic. Taking a battery of 100 horses you would find one horse in one section with it, and probably three or four days later you would find another at the other end of the line with it, and its incidence was fairly regular. You would go on getting cases, but seldom you would get one horse attacked which was next to another which had the disease. Of course if that did occur it was not evidence of it being directly contagious.

With regard to it being artificially given to an animal, a great many experiments were made, some very simple and some going very deeply into it. Very often the discharge from the eye was simply taken on a swab and rubbed on to another eye, but in very few cases has any result been got from this. The results were so inconclusive that it is quite likely the animal that did take it in this manner would have become infected in the ordinary course of events. In another corps some experiments were made by injecting fluid from the anterior chamber of diseased eyes into the anterior chamber of sound eyes. One animal, perhaps, was attacked; several others did not get it, and the evidence of these experiments was that the disease could not be transmitted in this manner. I believe in some places this disease is said to be hereditary. I do not think there is much in the argument, because English horses are fairly subject to it, practically just as much so as horses from America, where the disease has been known for a long time, and our Australian horses also got as much of the disease as the others. I never saw the disease in Australia before the war, but our horses were subject to it in the war theatre. Perhaps the most definite thing was some work done by Captain Dalling at the end of last year. I have his article here. He states he discovered what he describes as a nerve bacillus in sections from the optic nerve, and he had no difficulty in making cultures of it. He also prepared a vaccine with which he states he has had good results. This work was done fairly late in the war, and we had not much chance of finding out the value of it. I don't know if he has done anything since, but possibly he might be on the right track.

The symptoms are lachrymation; the eye is closed, and you find some conjunctivitis with distinct photophobia. You also get a yellowish precipitate in the anterior chamber which falls to the lower part. Sometimes there is just a thin line of precipitate; sometimes there is a fair amount of it. You get in the early stages congestion of the blood vessels of the cornea, which generally after the first attack becomes opaque. The other symptoms seem to vary. In some cases we get cataract. The crystalline lens becomes quite opaque—the clear opalescent cataract that is seen occurring from other causes. It was not uncommon to see an animal blind in both eyes. You could easily tell that an animal had had one or more attacks as it came towards you: you could see one eye considerably smaller than the other one. Sometimes we got adhesions forming between the iris and the lens, but not in all cases.

The symptoms which appeared on the first attack were more marked at each subsequent attack, until the animal became blind. I understand there has been very little found in the way of changes in the optic nerve.

The treatment used has been rather interesting. I think what seemed to be favoured most was the injection of one cubic centimetre of Lugol's solution into the supra-orbital fat. Some success was claimed for it before the war, but I am very doubtful about it myself. Two of my officers made some experiments. They were for some time in fairly large stables, and they had a fair number of cases. One used Lugol's solution and the other used none, and it was difficult to find which treatment was the most successful.

The first thing is to cover the eyes. It seemed to impede the symptoms to a certain extent; and bathing with hot water and applying pressure seemed to be useful. I think the most successful treatment was the use of atropine; there seemed to be a fair amount of success with it. It certainly seemed to prevent adhesions. Other people recommend during the treatment that an aloes purgative should be given. But I think our greatest hope seems to be the probability of a vaccine treatment if the disease is one caused through micro organisms. I do not think there is much doubt that the disease will become fairly common in the United Kingdom. I believe it is already pretty common in America. The reason I think this discussion will be valuable is the possibility of stimulating investigation. If we can find out anything it will be valuable, because there is not much doubt we are going to have trouble with it.

Capt. E. R. Steel, B.V.M., American Army Veterinary Corps.—I was asked to present the American point of view on this disease. Unfortunately I have no figures from the Army. I do not know of any that have been gathered. I have had some experience in the field and in practice. The disease has been with us in America, I think, for the last fifty years anyhow, but we have made no solution of the problem of its cause and distribution. This new treatment that is over here, the vaccine, is probably the most favourable—at least it is the most optimistic. In the field, animals have been brought to my hospital and treated, atropine being used to dilate the pupil to prevent adhesions, alternately with solutions of eserine which you know causes contraction. We hope something will come of this new work on the infectious character of the disease. We had a hospital working during the last six months of the war, but most of our time was occupied with the treatment of mange. But the investigators in the States will possibly do some more work in future on specific ophthalmia. We are not afraid of the disease in America. It is not a highly contagious disease. Possibly one or two animals on a farm become affected. It is a popular opinion among the farmers that nearly all the colts from a stallion affected with specific ophthalmia will become blind between the ages of four and seven. They are not born blind, but they become blind later on.

The Chairman (Mr. A. Gofton): I do not propose to keep you any length of time because the ground has been fairly well covered by the previous speakers. In the first place I was surprised to hear Colonel Matson express the extent to which he viewed this disease as a serious factor in the armies. At one time, and when the greatest amount of discussion was taking place in respect of this disease, I was led to understand that the total of horses affected in the British Army did not exceed one per cent. I think one may take it as exceeding that, but even exceeding that I do not think it was such a very serious factor as it would at first appear to be. Certainly when you got a large number of affected animals together in one centre it appeared to be much more serious than probably it was in reality.

Ophthalmia is an inflammatory disease, but it is not confined to any particular portion of the eye, all portions of the eye share in the change in some degree. Mention was made of the change in the cornea. It is quite certain that in all but the most acute attacks you can see marked changes in the iris before the changes have become pronounced in the cornea. Steaminess and opacity quickly appear at the periphery, but before they extend right over the surface of the cornea you can see very distinctly changes in the iris on a very simple examination of the eye. One of the first changes is the loss of lustre in the iris, which is very pronounced, and firm contraction of the pupil. While these parts are primarily and most obviously affected, all parts of the eye share in the changes which take place. Indeed, that is very obvious when one comes to examine eyes in the later stages of the disease, when one can determine, in the absence of obvious change in the cornea, very distinct and very obvious changes in the retina and posterior chamber which result either in the total loss of vision, or its reduction to such a point that for practical purposes the animal must be regarded as blind.

Blindness is an almost certain factor resulting from this disease, and it is not an easy matter to estimate what would be the average length of time between the first attack and the ultimate blindness. One has known horses attacked with this disease in which the symptoms never abated from the time they first appeared till the horse became blind, and even after blindness supervened acute symptoms persisted. In such cases the only way of giving relief to the animal and restoring usefulness was the removal of the affected eye, a procedure necessarily only applicable when the disease was limited to one eye. While that sometimes occurs, one may find on the other hand as long an interval as a year or eighteen months occurring between attacks.

Another point which was raised is that a horse which has had a series of attacks and which has become blind is very much less liable to a recurrence of acute symptoms. At one time I had for a number of months about 300 blind horses under my observation, and it was my experience every morning to find one, two, and three more horses pulled out which manifested a recurrence of symptoms in the blind eyes. There is a diminished probability of the appearance of acute symptoms, but not immunity. A point of interest is whether this disease is infectious or not. I think he would be a rash man who asserted positively that this was not an infectious disease. At the same time there is no definite or clear evidence to show that it is actually contagious. While I have not been satisfied that the disease is contagious I am not prepared to say that the other view—that it is not contagious, is correct.

Reference was made to attempted transmission from one animal to another. I myself carried out a number of attempts to transmit the disease. I tried the transfer of the fluids and exudates from the anterior chamber of affected eyes to the anterior chamber of sound eyes. I also removed portions of affected iris and transferred them into sound eyes, but without exception these attempts at transmission were failures, as were also attempts by the transfusion of blood from animals with acute attacks of the disease to animals which were healthy. In no case was there the slightest evidence of infection. While that is so, these attempts do not by any means exhaust the methods of transmitting infection, and there is plenty of room for further observations to be made determining—or otherwise, the infectivity of this disease. As regards the nerve bacillus discovered by Captain Dalling, I have read his article, and one appreciates the work Captain Dalling has done in France; but with all respect to that work one can only say that a good deal has yet to be done before the real relationship of this bacillus to the disease is determined. One cannot say more than that at the present time.

Just a word with regard to the actual causes of the blindness in this disease. The blindness in the majority

of cases is due to false cataract, that is to say it is due to a firm deposit on the front of the capsule of the lens, occluding the opening of the pupil. Apart from that, we find other causes which are responsible for blindness. One of these is dislocation of the lens, either anterior or posterior. We find also deposits in the posterior chamber, often in considerable quantity, and sometimes in flakes of considerable size. I always regard an animal in which these deposits are found as very uncertain and dangerous, because sometimes his vision is good and sometimes it is very bad. It all depends on the position of the flakes in relation to the line of vision. If they are in the line of vision the vision is bad; if they are clear of the line of vision the vision is better. In addition to the causes mentioned one not infrequently finds detachment of the retina responsible for blindness. Further, there are some cases in which there is a distinct and obvious change to be found in the fundus of the eye which can be very easily seen on examination with an opthalmoscope. You can detect it as being something which is not normal, and associated with it you find pretty well a complete loss of vision. I am unable to say what the pathological change is in these cases.

I want to say one word with regard to the diagnosis of this disease in eyes during the quiescent periods, because I think that it is of material importance to be able to recognise an eye which has been affected with ophthalmia, in which vision has not been lost, and in which there are no acute evidences of disease. These eyes can be detected even after a mild attack leaving very little obvious change in the eye, if you go about in the right way. I like to examine with an ophthalmoscope and also with the naked eye. If you want to detect these eyes get the horse with the direct rays of light shining straight into his eyes. You can then pick up at once by some little loss of lustre in the iris—which is a certain legacy of even a mild attack, together with a slightly ragged edge around the opening of the pupil. For seeing deeper parts of the eye you must have an ophthalmoscope, and I used one which was made very simply by a tinsmith, with an ordinary torch, a piece of buiscuit tin and a small portion of a broken mirror. It answered equally as well as the orthodox instrument. Atropine is of material value before making the examination, and, to be satisfactory, you require to allow the atropine to be in the eye for a couple of hours before making the examination.

As to treatment, mention was made of the use of injections of iodine into supraorbital fat. I never saw one horse which in my opinion, received the slightest atom of benefit from its use. I think the only treatment which did give any measure of satisfaction—I won't say it was wholly satisfactory—was the use of atropine, and I think atropine did materially relieve the discomfort and pain which the horses suffered during an attack. I think it tended to cut short the progress of the disease by resting the iris.

Replying to a question, the Chairman said atropine was repeated daily or every second day, and an ointment was used in preference to lotion.

Mr. CAMERON: There was an Army circular came round about ophthalmia, and it said in America they they had a similar disease which was proved on investigation to be due to the feeding of cottonseed cake.

Captain STEEL: I have heard about the condition. I believe the feeding of cottonseed cake had nothing whatever to do with the cases of specific ophthalmia.

Professor LINTON: The circulars have been many and varied. Cottonseed and product of cake does contain a substance, an alkaloid, which produces certain symptoms, but it never produces anything like specific ophthalmia. There is one point in connection with this disease which has not been mentioned, and that is the great prevalence of the disease during the Boer war, and one wonders whether the conditions have any close connection with the disease itself, or whether the disease is truly infectious. It has of course cropped up from time to time in isolated cases in this country, but as for being infectious, we in this country are not inclined to consider it so. Isolated cases have occurred in the stable, and other animals have been in close contact, using the same utensils, and the disease has not spread. But it caused a great deal of trouble during the Boer war, and one is inclined to think that the conditions under which the animals are kept must be a pre-disposing factor.

Major BAIRD: I have seen nothing of the work abroad, but although we have had plenty of horses through our hands on the way from America, we never had an outbreak of ophthalmia here. We had sporadic cases of it, but never more than one at a time, and certainly not more than one per cent. As a general practitioner I have seen just as many cases of it before the war as I have ever seen amongst the horses both going and coming from the front. One would have imagined that if the disease was of a contagious nature and so prevalent we certainly would have some of it sent back to us. In all these repatriated horses sent back here we hardly have had a case of it, and so there must be something in the surroundings to produce it. I have listened with very great pleasure to the remarks made, but that is my experience. It does not seem to be a disease of Great Britain. Whether it will become prevalent afterwards or not we do not know, but with all these horses which came back from overseas we had very little of it.

Colonel MATSON: With regard to the one per cent. probably a great deal more than one per cent of the animals were affected with ophthalmia, either in the acute stage or in the latent stage.

Mr. J. TAYLOR: Nearly all the horses I ever saw with ophthalmia in Edinburgh with Mr. Rutherford were Canadian. At one time a certain jobmaster was bringing a lot into Edinburgh, and a big contractor was also getting them, and these were the only two places we used to get specific ophthalmia. I have often wondered if it is common across in America, because it was always in American horses we got it. At the present time since the horses have been repatriated, and we are getting a lot from this City, I have had several cases of azoturia and the cases are all in American or Canadian horses.

Mr. PEGGIE: As a general practitioner I would like to ask the Presidident if, in the cases of specific ophthalmia he has noticed at the front he always found it as a condition *per se*. Is there any experience of a type of specific ophthalmia in cattle and sheep?

Capt. JONES: I found in France the practical immunity of mules to this disease. I also take leave to doubt, Mr. President, the one per cent. theory. I had a good deal of experience, and I am of opinion that the prevalence was much greater. Prof. Ainsworth-Wilson and I have had a considerable number of animals to examine which arrived from the States and Canada, and at one time the examination of mares was included. These mares were branded with the intention of their being returned to this country for breeding purposes. That examination led me to make a cursory examination of the eyes of all remounts and of horses going overseas, and I came to the conclusion—I admit the examination had to be of necessity quickly performed—that two per cent. of the animals arriving from the States and Canada showed evidence more or less of specific ophthalmia. Certainly, of those I examined more or less carefully for breeding purposes two per cent. were rejected for evidence of specific ophthalmia. I have nothing to add with regard to treatment. I have tried the ordinary methods and I agree that injections of Lugol's solution

are of no value. The only drug which has any effect is atropine, but it is purely palliative.

The CHAIRMAN: One point raised is with regard to the greater prevalence of this disease under war conditions against ordinary civil conditions. Well, it is just a question really whether it prevails to a greater extent under war conditions than it does under normal conditions. We see it to a greater extent under war conditions because we have then larger collections of horses than ever exist under peace conditions, and in that way it is brought much more forcibly to our notice. Whether its occurrence is actually greater or not, I am not prepared to say. There seems to be a little difference of opinion with regard to this one per cent. I mentioned it to you because I was struck with Colonel Matson's statement that he found as high a percentage as 30 per cent. in some of his units.

In connection with the infectivity of this disease, I do not quite see that it can be excluded from the class of contagious diseases because it occurs more or less sporadically. I mentioned in my opening remarks that one would be very rash if one went so far as to say definitely that this disease is non-contagious. Tetanus is a contagious disease, and it occurs sporadically. One cannot say that ophthalmia may not fall into a similar category. Our knowledge at the present time is inconclusive. So far as I know there is nothing whatever written of any value with regard to the histo-pathology of this disease. On the question raised by Mr. Peggie as to whether this disease occurred by itself, so far as my experience goes you find it occurring under all conditions. You may find it occurring alone and also sometimes in a horse which is the subject of some other disease, but that other disease is not a factor in the development of ophthalmia. As to the immunity of mules, if you worked out percentages you would find that as a matter of fact mules are attacked just as frequently as horses.

The Hon. Sec. (Mr. James Henderson) moved a vote of thanks to the gentlemen who had taken part in the discussion. They had had, he said, a valuable and successful meeting.

A vote of thanks to the Chairman concluded the proceedings.

ANIMALS (ANÆSTHETICS) BILL.

A Select Committee of the House of Lords, with LORD WILLOUGHBY DE BROKE as chairman, met on Monday, for the first time to consider the Bill to make further provision for the protection of animals from cruelty.

The schedules deal only with operations on horses, dogs, cats, and bovines, but the Bill would empower the Board of Agriculture to order the use of anæsthetics for such other operations on domestic animals as might be thought advisable, after full inquiry, and after submitting a Draft Order to each House of Parliament for 30 days.

Sir STEWART STOCKMAN, Chief Veterinary officer of the Board of Agriculture, gave evidence in support of the proposals in the Bill.

Major HOBDAY, F.R.C.V.S., in his evidence, said that he was operating daily, and was strongly of opinion that a local or general anæsthetic should be compulsory for every operation. In that respect he would go beyond the scope of the Bill, and compel the use of an anæsthetic, to prevent pain.

With regard to the sub-section which would prevent anyone except a veterinary surgeon administering anæsthetics, Major Hobday said that the effect of that would be that two veterinary surgeons would be required for every operation. That was unnecessary, as anæsthetics administered under the direct supervision of a veterinary surgeon would be sufficient. He thought that no operation should be performed on any animal by anyone except a qualified veterinary surgeon; but that was hardly a practical proposition, because, in country districts, where lambs and pigs had to be dealt with in large numbers, there were not enough veterinary surgeons to perform the necessary operations. At present it was necessary to permit unregistered men to perform minor operations.

In further evidence, it was stated that in Great Britain there were about 2,500 registered veterinary surgeons and about 40 million domestic animals, not counting cats and dogs.

TUESDAY.

Mr. LAMB, on behalf of the Scottish Board of Agriculture, said that if the Bill was passed there should be a postponement for two years of the operation of the clauses regarding dishorning cattle. The provision that anaesthetics should only be administered by a veterinary surgeon could not be carried out in Scotland, where one man's district frequently covered many miles.

Sir JOHN M'FADYEAN, Principal of the Royal Veterinary College, denied that the introduction of the Bill was by, or at the instigation of, the College. He contended that all the operations included in the schedules were severely painful, with the possible exception of the docking of the tail. Such operations could not be performed without the use of the twitch, which was so painful to horses as to be a veritable torture.

Answering Lord CHAPLIN, the witness withdrew the wore "torture" in relation to the twitch, and substituted the words "excruciatingly painful."

Lord CHAPLIN: Don't you know that there are some horses which cannot be shod without a twitch being used, for fear of their kicking the operator?—Yes, I think so; and I am certain that it causes them pain.

Lord CHAPLIN: I have had fifty years' experience, and I know as much about horses as most people, and I say it is perfectly ridiculous to say a twitch cannot be used without causing extreme pain. I don't agree with you at all.

Sir JOHN: I have come here to give my opinion, and I have given it, and I must respectfully disagree with your lordship.

Lord CHAPLIN: And the use of the twitch, you say to be effective, must cause excruciating pain?—Yes.

The witness said the inconsistency of the existing law was shown by the fact that he could not do more than cause a pin-prick of pain for the purpose of acquiring knowledge, but other people, for the purpose of improving the value of the animal, could cause a hundred times the pain.

At the close of his evidence Sir John apologised if he had spoken too strongly.

The CHAIRMAN: Please don't attempt to apologise for speaking plainly. The trouble in these days is that public men do not speak out plainly enough.

Prof. MACQUEEN, Professor of Surgery, Ryl. Vet. Coll., London, supported the Bill.

Mr. FINLAY KERR, superintendent veterinary inspector for the Veterinary Branch of the Department of Agriculture in Ireland, said a great number of Irish cattle were exported to England and Scotland, and the imposing of the obligation to use anæsthetics for dishorning would seriously effect Irish breeders. If the clauses were postponed for two years all cattle that now had horns requiring operation might be dealt with as at present, and the cattle of the future could be so dealt with when calves that there would be no need for such an operation. He had seen the operation of dishorning many times—both by clipping off the top of the horn

with shears, and also by the horn being sawn through. Both operations were of a brutal character, and caused animals excruciating pain, during which they roared and struggled.

The CHAIRMAN: You say this is a brutal operation, and yet you say you wish it continued for two years?—The Department thinks it necessary in the interests of the trade.

The CHAIRMAN: You say it is a brutal operation. It will be equally so during those two years. I cannot say I am very much surprised. Your proposal is to let the breeders have the benefit of the prices they get for cattle without any obligation to adopt humane methods in their operations on the cattle. You will perpetuate the process you have already condemned.

Answering another member of the Committee, the witness said it could be made comvulsory for the animals to be shipped with the horns for those two years.

The CHAIRMAN: Your proposal, shortly, is to take the cash and let the animals suffer pain. I have nothing further to ask you.

WEDNESDAY.

Mr. J. LENNOX gave evidence on behalf of the Farmers' Union of Scotland. The union, approved the principal of avoiding pain in animals, but considered the Bill in its present form unworkable. Unless amended it would become a dead letter or lead to wholesale prosecutions. The Bill proposed that a general anæthetic must be administered when cattle over six months old were being dishorned. The operation was equally painful under six months, it was doubtful whether great pain was caused, and it only lasted ten or twenty seconds. It would be impossible to give anæsthetics to Irish store cattle, which were being imported in large numbers, but it was necessary to dishorn them, as otherwise they gored each other. Many of the scheduled operations were practically painless. He did not understand who put amputation of limbs in the schedule. He never saw a horse with a leg amputated in his life.

The CHAIRMAN: "Not even in Scotland?"—"No never."

The witness added that dogs could not be chloroformed as it was fatal to them. He did not think anæsthetics were necessary when a horse's tail was being docked, as the operation only lasted half a second.

The CHAIRMAN: Why is it necessary to dock horses' tails?—Because they get their tails over the reins and kick.

The CHAIRMAN: I have driven horses of all kinds for a good many years, and I think it is much safer to drive a horse with a long tail, because if it gets its tail over the rain it is longer and easier to handle, and as it has not been docked he will allow it to be handled. A horse that has been docked is much more likely to kick.

Mr. LENNOX agreed that a horse with a docked tail was more likely to kick, but said the animal had not the same chance of getting his tail over the rein. He agreed it was probable that the improvement of anæsthetics would make the application of local anæsthetics easy, and he considered some legislation desirable. He would like to see unqualified persons allowed to give local anæsthetics.

Replying to LORD STANHOPE, the witness said he did not think animals so sensitive to pain as human beings. Dishorning was no more painful to an animal than the removal of a finger nail from a man.

The Committee adjourned.

Original articles and reports should be written on one side of the paper only and authenticated by the names and addresses of writers, not necessarily for publication.

Meat Loss from Disease.—U.S.A.

The Federal campaign to eradicate tuberculosis has been divided into three well-defined projects. The first is the eradication of tuberculosis from individual herds of pure-bred cattle; the second is the eradication of cattle tuberculosis from circumscribed areas; the third is the eradication of tuberculosis among swine.

It is estimated by officials in close touch with available records that 15 per cent. of pure-bred cattle in this country are affected with tuberculosis. In grade cattle and swine the percentage of infection is gradually increasing, as shown by post mortem records in establishments where meat inspection is maintained.

The 1919 agricultural appropriation bill just passed by Congress provides that the Federal Government shall pay indemnity to owners whose cattle are slaughtered because they have been found infected with tuberculosis.

The Department of Agriculture is to pay one-third of the difference between the appraised value of the cattle and the salvage value of the slaughtered animals, provided that the State, county, or municipaliy in which the cattle are owned and kept is co operating in the tuberculosis work and pays at least an equal amount to the owner. In no case is the Federal Government to pay more to the owner than is paid by the State, county, or municipality. No payment by the Federal Government is to be more than $25 for any grade animal or more than $50 for any pure-bred animal, and no payment is to be made unless the owner has complied with all quarantine regulations.

Another important development was the unanimous adoption by breeders and livestock sanitarians of national reputation of regulations for accrediting pure-bred herds of cattle. This action, marked the co-ordination of efforts of individuals and the State and Federal Governments.

The Department of Agriculture has issued its first list of herds officially accredited as free from tuberculosis. The herds numbered on that date approximately 240. The list also named herds that had passed one successful test. They must pass another annual test successfully before being placed on the accredited list.

The annual loss from tuberculosis among cattle and hogs in the United States alone is stated by the Government to be at least $40,000,000. This is a loss that should have been checked long ago.—*National Provisioner*, New York.

Motor Spirit Licence Duty.

The following are extracts from Finance Bill, 1919:—

"Sec. 12. (1) As from the first day of May, nineteen hundred and nineteen, the excise duties upon motor spirit made in Great Britain or Ireland, and on the licence to be taken out annually by a manufacturer of motor spirit, shall cease to be chargeable.

(2) As from the seventeenth day of May, ninetren hundred and nineteen, sections fifteen and sixteen of the Finance Act, 1916, which relate to motor spirit licence duty shall cease to have effect."

THOSE CHEAP SNEERS.

Sir, The following is worth noting:—

"WHY TUBERCULOSIS SPREADS.

How tuberculosis among cows is spread was related by Mr. L. Mackenzie, a well-known Devonshire medical man, at the last meeting of the Devon County Council.

In order to emphasise the necessity of the executive and agricultural committee doing all in their power to

assist in the fight against tuberculosis, Mr. Mackenzie told the following story :—

'I went to a farm in North Devon the other day,' he said, ' and there I saw two cows, which were very ill indeed. The farmer told me a veterinary had been treating them for asthma and diarrhœa.

As a matter of fact, they were both in an advanced stage of consumption."

Mr. L. Mackenzie ought to be made to substantiate his story, and to state what qualifications he possesses to diagnose tuberculosis in cattle. I don't suppose he has ever heard of Johne's disease, or even seen a simple case of diarrhœa in the cow ; and the introduction of the asthma (in cattle) side-line seems to indicate from the veterinary point of view that the tale was pure invention on his part.

I wonder what would be thought of a veterinary surgeon who said :—"I have seen two human patients in bed to-day. They both had typhoid fever, but the doctor was treating them for pneumonia."—Yours truly,

G. MAYALL.

ARMY VETERINARY SERVICE.

Buckingham Palace, July 12.

The King held an Investiture in the Ball Room of the Palace at 11 o'clock this morning.

The following were severally introduced into the presence of The King, when His Majesty conferred decorations as follows :—

THE MILITARY CROSS.

* * * *

Capt. HAROLD STEPHENSON.

War Office, July 15.

The King has been graciously pleased to confer the Territorial Decoration upon the follg. Officers of the T.F. who have been duly recommended for the same under the terms of the Royal Warrant dated Aug. 17, 1908, as modified by R.W., dated Nov. 11, 1918 :—

Offrs. of the T.F. who are eligible and recommended for the Territorial Decoration :—

* * * * *

Maj. J. J. Ridley, Maj. P. W. Dayer-Smith, O.B.E. ; Maj. E. W. Parks, O.B.E. ; Maj. J. A. Connell, Capt. C. Drabble, Maj. J. E. L. Still.

War Office, July 5th.

The following is continuation of the dispatch received from Sir D. Haig, submitting names deserving of special mention :—

(Staff.)

Rowston, Capt. (T.Maj.) W. N. ; Rudd, Lt.-Col. (A.Col.) T. W. ; Sikes, T.Capt. (A.Maj.) C. W. B. ; Steel, Maj. (A.Lt.-Col.) C. E. ; Steevenson, Maj. (A.Lt.-Col.) J. R., D.S.O. ; Stewart, Capt. (T.Maj.) H. A. ; Tatam, Lt.-Col. (A.Col.) W. J., C.M.G. ; Verney, Maj. L. M., D.S.O., F.R.C.V.S. ; Wadley, Maj. and Bt. Lt.-Col. (A.Lt.-Col.) E. J., D.S.O. ; Williamson, Capt. (A.Maj.) D. R. (S.R.) ; Wright, Capt. (A.Maj.) J. H. (T.F.).

War Office, July 21.

The following are among the decorations and medals awarded by the Allied Powers at various dates to the British Forces for distinguished services rendered during the course of the campaign. The King has given unrestricted permission in all cases to wear the decorations and medals in question :—

MEDAILLE D'HONNEUR AVEC GLAIVES EN VERMEIL.

* * * *

Capt. (temp. Maj.) E. C. DOYLE, D.S.O.

The ROYAL ARMY VETERINARY CORPS was represented in the Victory March of last Saturday by

Major General L. J. Blenkinsop, C.B., D.S.O., Director-General Army Veterinary Service.
Col. E. E. Martin. C.M.G., C.B.E.

With the Detachment were
Capt. J. O. Andrews, D.S.O.
Capt. H. Stephenson, M.C.

With the men of 1914—"The Old Contemptibles"
Col. W. Dunlop Smith, C.M.G., D.S.O.

Extracts from *London Gazette*

WAR OFFICE, WHITEHALL, July 9.

REGULAR FORCES. ROYAL ARMY VETERINARY CORPS.

Majs. to be actg. Lt.-Cols. while holding the appt. of A.D.V.S. :—D. Macdonald (Feb. 19) ; L. M. Verney, D.S.O., F.R.C.V.S. (Feb. 26).

To be actg. Majs. while holding the appt. of D.A.D.V.S. : Capt. E. G. Turner, D.S.O. (Feb. 19) ; Capt. and Bt. Maj. G. Williamson, Capt. W. H. Thomas, Capt. B. R. Body (Feb. 26).

July 10.

To be Capts. (July 10) :—F. C. Minett, M.B.E., from Capt. Spec. Res. From Capts. (T.F.)—V. A. Bartrum, O.B.E., A. H. Adams, J. Southall, C. Holland, M.C. From Capts. Spec. Res.—G. Lloyd, D.S.O., B. J. W. Nicholas, W. P. S. Edwards, from Capt. T.F. From Capt. Spec. Res.—H. B. Williams, O.B.E., T. Menzies, E. Wallace, P. Howard, J. H. M. White, F. J. Andrews, J. Mullany, from Capt. T.F. From temp. Capts.—L. E Prichard, J. S. Keane, J. G. E. Gallie, D. A. Gilmor, J. Bell, M. A. Murphy ; G. Barnett, M.C., from Capt. Spec. Res. ; M. J. Killelea, from temp. Capt. From Capt. Spec. Res.—P. F. Woodland, E. C. Bowes, C. K. Calder, from temp. Capt. ; M. Farrelly, from Capt. Spec. Res. From temp. Capt.—R. B. Crichton, W. L. Sinton, T. Hodgins, C. S. Northcott, R. E. Bond, C. W. Heape, from temp. Lt. From temp. Capt.—C. S. Conder, T. A. Shaw, J. J. Clune, K. S. Simpson, from temp. Lt.

July 11.

Temp. Lt. J. Finlayson to be temp. Capt. (May 31).

July 12.

Major G. Conder, D.S.O., relinquishes the actg. rank of Lt.-Col. on ceasing the hold the appt. of A.D.V.S. (Jan. 21).

The follg. relinquish the actg. rank of Maj. : Temp. Capt. E. B. Reynolds (March 16) ; Capt. U. W. F. Walker, M.C., on ceasing to hold the appt. of D.A.D.V.S. (March 18).

Temp. Lt. J. McI. Galloway to be temp. Capt. (June 29).

July 14.

Temp. Capt. F. Lindsay relinquishes his commn. on account of ill-health (July 15), and retains the rank of Capt. ; Temp. Lt. W. S. MacKintosh to be temp. Capt. (June 18).

July 15.

The following officers relinquish their temp. commns. on ceasing to be empld. with the Union Impl. Service on the dates as specified, and retain their respective ranks :—

S. Afr. Vet. Corps.—Capt. G. McCall (Sept. 17, 1918) ; Capt. H. M. Webb (Jan. 3).

AMENDMENTS.—*Gazette*, dated June 9.—For. Col. and Hon. Maj.-Gen. (T.Brig-Gen.) J. Moore, C.B., C.M.G., F.R.C.V.S., *read* Maj.-Gen. J. Moore, C.B., C.M.G., F.R.C.V.S., Honorary Brig.-Gen.

July 16.

Temp. Capt. H. H. Brodie relinquishes his commn. on account of ill-health contracted on active service (July 17), and retains the rank of Capt.

with shears, and also by the horn being sawn through. Both operations were of a brutal character, and caused animals excruciating pain, during which they roared and struggled.

The CHAIRMAN: You say this is a brutal operation, and yet you say you wish it continued for two years?—The Department thinks it necessary in the interests of the trade.

The CHAIRMAN: You say it is a brutal operation. It will be equally so during those two years. I cannot say I am very much surprised. Your proposal is to let the breeders have the benefit of the prices they get for cattle without any obligation to adopt humane methods in their operations on the cattle. You will perpetuate the process you have already condemned.

Answering another member of the Committee, the witness said it could be made comyulsory for the animals to be shipped with the horns for those two years.

The CHAIRMAN: Your proposal, shortly, is to take the cash and let the animals suffer pain. I have nothing further to ask you.

WEDNESDAY.

Mr. J. LENNOX gave evidence on behalf of the Farmers' Union of Scotland. The union, approved the principal of avoiding pain in animals, but considered the Bill in its present form unworkable. Unless amended it would become a dead letter or lead to wholesale prosecutions. The Bill proposed that a general anæthetic must be administered when cattle over six months old were being dishorned. The operation was equally painful under six months, it was doubtful whether great pain was caused, and it only lasted ten or twenty seconds. It would be impossible to give anæsthetics to Irish store cattle, which were being imported in large numbers, but it was necessary to dishorn them, as otherwise they gored each other. Many of the scheduled operations were practically painless. He did not understand who put amputation of limbs in the schedule. He never saw a horse with a leg amputated in his life.

The CHAIRMAN: "Not even in Scotland?"—"No never."

The witness added that dogs could not be chloroformed as it was fatal to them. He did not think anæsthetics were necessary when a horse's tail was being docked, as the operation only lasted half a second.

The CHAIRMAN: Why is it necessary to dock horses' tails?—Because they get their tails over the reins and kick.

The CHAIRMAN: I have driven horses of all kinds for a good many years, and I think it is much safer to drive a horse with a long tail, because if it gets its tail over the rain it is longer and easier to handle, and as it has not been docked he will allow it to be handled. A horse that has been docked is much more likely to kick.

Mr. LENNOX agreed that a horse with a docked tail was more likely to kick, but said the animal had not the same chance of getting his tail over the rein. He agreed it was probable that the improvement of anæsthetics would make the application of local anæsthetics easy, and he considered some legislation desirable. He would like to see unqualified persons allowed to give local anæsthetics.

Replying to LORD STANHOPE, the witness said he did not think animals so sensitive to pain as human beings. Dishorning was no more painful to an animal than the removal of a finger nail from a man.

The Committee adjourned.

Original articles and reports should be written on one side of the paper only and authenticated by the names and addresses of writers, not necessarily for publication.

Meat Loss from Disease.—U.S.A.

The Federal campaign to eradicate tuberculosis has been divided into three well-defined projects. The first is the eradication of tuberculosis from individual herds of pure-bred cattle; the second is the eradication of cattle tuberculosis from circumscribed areas; the third is the eradication of tuberculosis among swine.

It is estimated by officials in close touch with available records that 15 per cent. of pure-bred cattle in this country are affected with tuberculosis. In grade cattle and swine the percentage of infection is gradually increasing, as shown by post mortem records in establishments where meat inspection is maintained.

The 1919 agricultural appropriation bill just passed by Congress provides that the Federal Government shall pay indemnity to owners whose cattle are slaughtered because they have been found infected with tuberculosis.

The Department of Agriculture is to pay one-third of the difference between the appraised value of the cattle and the salvage value of the slaughtered animals, provided that the State, county, or municipaliy in which the cattle are owned and kept is co operating in the tuberculosis work and pays at least an equal amount to the owner. In no case is the Federal Government to pay more to the owner than is paid by the State, county, or municipality. No payment by the Federal Government is to be more than $25 for any grade animal or more than $50 for any pure-bred animal, and no payment is to be made unless the owner has complied with all quarantine regulations.

Another important development was the unanimous adoption by breeders and livestock sanitarians of national reputation of regulations for accrediting pure-bred herds of cattle. This action, marked the co-ordination of efforts of individuals and the State and Federal Governments.

The Department of Agriculture has issued its first list of herds officially accredited as free from tuberculosis. The herds numbered on that date approximately 240. The list also named herds that had passed one successful test. They must pass another annual test successfully before being placed on the accredited list.

The annual loss from tuberculosis among cattle and hogs in the United States alone is stated by the Government to be at least $40,000,000. This is a loss that should have been checked long ago.—*National Provisioner*, New York.

Motor Spirit Licence Duty.

The following are extracts from Finance Bill, 1919:—

"Sec. 12. (1) As from the first day of May, nineteen hundred and nineteen, the excise duties upon motor spirit made in Great Britain or Ireland, and on the licence to be taken out annually by a manufacturer of motor spirit, shall cease to be chargeable.

(2) As from the seventeenth day of May, ninetren hundred and nineteen, sections fifteen and sixteen of the Finance Act, 1916, which relate to motor spirit licence duty shall cease to have effect."

THOSE CHEAP SNEERS.

Sir, The following is worth noting:—

"WHY TUBERCULOSIS SPREADS.

How tuberculosis among cows is spread was related by Mr. L. Mackenzie, a well-known Devonshire medical man, at the last meeting of the Devon County Council.

In order to emphasise the necessity of the executive and agricultural committee doing all in their power to

assist in the fight against tuberculosis, Mr. Mackenzie told the following story :—

'I went to a farm in North Devon the other day,' he said, ' and there I saw two cows, which were very ill indeed. The farmer told me a veterinary had been treating them for asthma and diarrhœa.

As a matter of fact, they were both in an advanced stage of consumption."

Mr. L. Mackenzie ought to be made to substantiate his story, and to state what qualifications he possesses to diagnose tuberculosis in cattle. I don't suppose he has ever heard of Johne's disease, or even seen a simple case of diarrhœa in the cow ; and the introduction of the asthma (in cattle) side-line seems to indicate from the veterinary point of view that the tale was pure invention on his part.

I wonder what would be thought of a veterinary surgeon who said :—" I have seen two human patients in bed to-day. They both had typhoid fever, but the doctor was treating them for pneumonia."—Yours truly,

G. MAYALL.

ARMY VETERINARY SERVICE.

Buckingham Palace, July 12.

The King held an Investiture in the Ball Room of the Palace at 11 o'clock this morning.

The following were severally introduced into the presence of The King, when His Majesty conferred decorations as follows :—

THE MILITARY CROSS.

* * * *

Capt. HAROLD STEPHENSON.

War Office, July 15.

The King has been graciously pleased to confer the Territorial Decoration upon the follg. Officers of the T.F. who have been duly recommended for the same under the terms of the Royal Warrant dated Aug. 17, 1908, as modified by R.W., dated Nov. 11, 1918 :—

Offrs. of the T.F. who are eligible and recommended for the Territorial Decoration :—

* * * * *

Maj. J. J. Ridley, Maj. P. W. Dayer-Smith, O.B.E. ; Maj. E. W. Parks, O.B.E. ; Maj. J. A. Connell, Capt. C. Drabble, Maj. J. E. L. Still.

War Office, July 5th.

The following is continuation of the dispatch received from Sir D. Haig, submitting names deserving of special mention :—

(Staff.)

Rowston, Capt. (T.Maj.) W. N. ; Rudd, Lt.-Col. (A.Col.) T. W. ; Sikes, T.Capt. (A.Maj.) C. W. B. ; Steel, Maj. (A.Lt.-Col.) C. E. ; Steevenson, Maj. (A.Lt.-Col.) J. R., D.S.O. ; Stewart, Capt. (T.Maj.) H. A. ; Tatam, Lt.-Col. (A.Col.) W. J., C.M.G. ; Verney, Maj. L. M., D.S.O., F.R.C.V.S. ; Wadley, Maj. and Bt. Lt.-Col. (A.Lt.-Col.) E. J., D.S.O. ; Williamson, Capt. (A.Maj.) D. R. (S.R.) ; Wright, Capt. (A.Maj.) J. H. (T.F.).

War Office, July 21.

The following are among the decorations and medals awarded by the Allied Powers at various dates to the British Forces for distinguished services rendered during the course of the campaign. The King has given unrestricted permission in all cases to wear the decorations and medals in question :—

MEDAILLE D'HONNEUR AVEC GLAIVES EN VERMEIL.

* * * *

Capt. (temp. Maj.) E. C. DOYLE, D.S.O.

The ROYAL ARMY VETERINARY CORPS was represented in the Victory March of last Saturday by

Major General L. J. Blenkinsop, C.B., D.S.O., Director-General Army Veterinary Service.
Col. E. E. Martin. C.M.G., C.B.E.

With the Detachment were
Capt. J. O. Andrews, D.S.O.
Capt. H. Stephenson, M.C.

With the men of 1914—" The Old Contemptibles"
Col. W. Dunlop Smith, C.M.G., D.S.O.

Extracts from *London Gazette*

WAR OFFICE, WHITEHALL, July 9.

REGULAR FORCES. ROYAL ARMY VETERINARY CORPS.

Majs. to be actg. Lt.-Cols. while holding the appt. of A.D.V.S. :—D. Macdonald (Feb. 19) ; L. M. Verney, D.S.O., F.R.C.V.S. (Feb. 26).

To be actg. Majs. while holding the appt. of D.A.D.V.S. : Capt. E. G. Turner, D.S.O. (Feb. 19) ; Capt. and Bt. Maj. G. Williamson, Capt. W. H. Thomas, Capt. B. R. Body (Feb. 26).

July 10.

To be Capts. (July 10) :—F. C. Minett, M.B.E., from Capt. Spec. Res. From Capts. (T.F.)—V. A. Bartrum, O.B.E., A. H. Adams, J. Southall, C. Holland, M.C. From Capts. Spec. Res.—G. Lloyd, D.S.O., B. J. W. Nicholas, W. P. S. Edwards, from Capt. T.F. From Capt. Spec. Res.—H. B. Williams, O.B.E., T. Menzies, E. Wallace, P. Howard, J. H. M. White, F. J. Andrews, J. Mullany, from Capt. T.F. From temp. Capts.—L. E Prichard, J. S. Keane, J. G. E. Gallie, D. A. Gilmor, J. Bell, M. A. Murphy ; G. Barnett, M.C., from Capt. Spec. Res. ; M. J. Killelea, from temp. Capt. From Capt. Spec. Res.—P. F. Woodland, E. C. Bowes, C. K. Calder, from temp. Capt. ; M. Farrelly, from Capt. Spec. Res. From temp. Capt.—R. B. Crichton, W. L. Sinton, T. Hodgins, C. S. Northcott, R. E. Bond, C. W. Heape, from temp. Lt. From temp. Capt.—C. S. Conder, T. A. Shaw, J. J. Clune, K. S. Simpson, from temp. Lt.

July 11.

Temp. Lt. J. Finlayson to be temp. Capt. (May 31).

July 12.

Major G. Conder, D.S.O., relinquishes the actg. rank of Lt.-Col. on ceasing the hold the appt. of A.D.V.S. (Jan. 21).

The follg. relinquish the actg. rank of Maj. : Temp. Capt. E. B. Reynolds (March 16) ; Capt. U. W. F. Walker, M.C., on ceasing to hold the appt. of D.A.D.V.S. (March 18).

Temp. Lt. J. McI. Galloway to be temp. Capt. (June 29).

July 14.

Temp. Capt. F. Lindsay relinquishes his commn. on account of ill-health (July 15), and retains the rank of Capt. ; Temp. Lt. W. S. MacKintosh to be temp. Capt. (June 18).

July 15.

The following officers relinquish their temp. commns. on ceasing to be empld. with the Union Impl. Service on the dates as specified, and retain their respective ranks :—

S. Afr. Vet. Corps.—Capt. G. McCall (Sept. 17, 1918) ; Capt. H. M. Webb (Jan. 3).

AMENDMENTS.—*Gazette*, dated June 9.—For. Col. and Hon. Maj.-Gen. (T.Brig-Gen.) J. Moore, C.B., C.M.G., F.R.C.V.S., *read* Maj.-Gen. J. Moore, C.B., C.M.G., F.R.C.V.S., Honorary Brig.-Gen.

July 16.

Temp. Capt. H. H. Brodie relinquishes his commn. on account of ill-health contracted on active service (July 17), and retains the rank of Capt.

July 21.

Asst. Dir. of Vet. Servs. and Remts. (Cl. X).—Temp. Capt. A. G. Doherty (Capt. E. Af. Vet. Dept.), and relinquishes the temp. rank of Lt.-Col. (May 17).

Major G. Conder, D.S.O., to be actg. Lt.-Col. whilst holding the appt. of A.D.V.S. (Feb. 20); temp.-Capt. D. R. Davis relinquishes his commn. on acct. of ill-health contracted on active service (July 22), and retains the rank of Capt.

July 22.

Temp. Capt. J. G. Taylor relinquishes his commn. on acct. of ill-health (July 22), and retains rank of Capt.

TERRITORIAL FORCE, ROYAL ARMY VETERINARY CORPS.

July 12.

Capt. A. Spreull, D.S.O., to be Maj. (June 18).

July 14.

Capt. (actg.-Lt.-Col.) J. MacArthur relinquishes the actg. rank of Lt.-Col. on ceasing to comd. a Veterinary Hospital (March 17).

Capt. (actg. Maj.) A Douglas relinquishes the actg. rank of Maj. on ceasing to be empld. as a Maj. with a Veterinary Hospital (March 14) (substituted for that which appeared in the *Gazette* of June 2).

July 15.

Capt. (actg. Maj.) G. E. Henson relinquishes the actg. rank of Maj. on ceasing to be empld. (June 20).

Capt. (temp. Maj. without pay and allces.) G. McIntyre relinquishes the temp. rank of Maj. (Jan. 29).

Capt. (temp. Maj.) P. McIntyre, O.B.E., relinquishes the temp. rank of Maj. on ceasing to be empld. (June 20).

Capt. (actg. Maj.) R. B. Palmer, M.C., relinquishes the actg. rank of Maj. on ceasing to be empld. (June 20).

Capt. (actg. Maj.) A. N. Foster, O.B.E., relinquishes the actg. rank of Maj. on ceasing to hold the appt. of a D.A.D.V.S. (April 17).

July 17.

Capt. (actg. Maj.) W. Stothert, O.B.E., relinquishes actg. rank of Maj. on ceasing to be empld. (June 22).

Aldershot Command Horse Show is to be held under the patronage of the King and the Presidency of Lieut-General Sir Archibald J. Murray, on August 13th, and 14 next. It is stated that one great aim of the promoters is the encouragement of horse-mastership throughout the British Army and the country generally.

OBITUARY.

WILLIAM H. CROWHURST, F.R.C.V.S., The Paddock, St. George's, Canterbury.

Graduated Lond: April, 1856.
Fellow, July, 1892.

Death occurred on Saturday, 19th inst. His age was 87.

The late Mr. Charles Sheather, F.R.C.V.S.

A correspondent sends us the following notes:—

Born April 6th, 1855, he was son of William Sheather, who was well known in the Coaching world, and greatly esteemed and respected by all who came in contact with him.

Charles Sheather himself was connected intimately with Road Coaches for many years, more especially on the Dorking and Guildford roads. A man of considerable genius; inventor of the "Pneumatic" and other pads for horses. A pioneer of chloroforming standing. His acute perception made him without peer in the diagnosis of lameness.

Master of the Worshipful Company of Farriers in 1905, 1906 and 1907, he was Official Measurer of Polo Ponies for the Hurlingham Club since 1903. Chief Veterinary Inspector to the Hackney Horse Society for many years, and to the International Horse Show since its inception. He acted also for the Hunters' Improvement Society, National Pony Society, Shire Horse Society, and the Board of Agriculture.

He had been established at 50a York Terrace, Regent's Park since 1877. Since his partner, Mr. C. Herbert Sheather, with whom he had been associated for over sixteen years, was granted a commission in the A.V.C. in November, 1915, he had been subjected to very severe strain in carrying on their practice. He passed peacefully away in his sleep in the early morning of the 12th July last, from heart failure.

Personal.

RIDER : NESS.—At Station Hotel, Aberdeen, on 12th July, by the Rev. A. Scadamore Forbes, James Roland Rider, M.R.C.V.S., Lieut., R.A.V.C., son of Mr. and Mrs. J. W. Rider, Beamish, Durham, to Georgina, daughter of Mr. and Mrs. Ness, 110 Union Grove, Aberdeen.

DISEASES OF ANIMALS ACTS 1894 TO 1914, SUMMARY OF RETURNS.

Period.		Rabies. Cases Confrmd Dogs	Rabies. Cases Confrmd Other Anmls	Anthrax Out-breaks (a)	Anthrax Animals.	Foot-and-Mouth Disease. Out-breaks (a)	Foot-and-Mouth Disease. Animals.	Glanders.† Out-breaks (b)	Glanders.† Animals.	Parasitic Mange. Out-breaks (b)	Parasitic Mange. Animals.	Sheep Scab. (b)	Swine Fever. Out-breaks (a)	Swine Fever. Slaughtered.*
GT. BRITAIN. Week ended	July 19	2		3	3			1	1	65	117	1	57	34
Corresponding week in	1918			3	4				2	54	79	1	31	16
	1917			5	5					54	60	2	35	12
	1916			6	7			1	1	29	47		87	69
Total for 29 weeks, 1919		121	3	109	145	19	154	15	41	3739	7320	218	1220	538
Corresponding period in	1918			151	170			23	63	3146	6011	246	845	323
	1917			308	352			15	27	1696	3352	390	1543	659
	1916			338	399	1	24	32	84	1565	3595	178	2895	8330

(a) Confirmed. (b) Reported by Local Authorities

† Counties affected, animals attacked :—Surrey

Board of Agriculture and Fisheries, July 22, 1919

Excluding outbreaks in army horses.

NOTE.—The figures for the Current Year are approximate only.

* As Diseased or Exposed to Infection